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# The Influence of Character Building, Learning Environment and Self Efficacy on Students' Work Readiness

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**Abstract.** Students' readiness to work is considered important for because of the more interest that individuals have, in this case are students; the higher work readiness will always be in their efforts to achieve the desired goals. This study aims to determine the effect both partially and simultaneously of character-building variables, learning environment and self-efficacy on work readiness. This research is a descriptive quantitative research. The population in this study is the twelve grade students of Automotive Lightweight Vehicle Engineering at Public Vocational High School 1 Trenggalek with a total of 143 students and a sample of 107 students that was taken by using proportional random sampling technique. The instruments used in this study were questionnaires and documentation. Analysis of research data uses descriptive statistical analysis, multiple linear regression analysis, classic assumption test which includes normality test, multicollinearity test and heteroscedasticity test, hypothesis testing includes t-test and f-test, determination coefficient (R2) and effective contribution. Based on the data analysis, the results, it shows that there is a partially and simultaneously significant influence of character building variables, learning environment and self-efficacy on work readiness for the twelve grade students of Automotive Lightweight Vehicle Engineering at Public Vocational High School 1 Trenggalek.

**Keywords**: Character Building, Learning Environment, Self-Efficacy, Work Readiness

## INTRODUCTION

Education world contributes greatly onto the development of human civilization that prepares superior quality human resources and is ready to work in accordance with their respective fields of expertise. Therefore, to create quality human resources, a synergy is needed between the business world or industrial world and educational institutions such as vocational high school (Owusu-Agyeman & Fourie-Malherbe, 2019).

One of the interesting problems to develop is related to student work readiness. It is due to the fact most vocational students are underestimated by the working world of which is caused by a lack of work creativity and student work readiness to enter the business or industry world (Wu, et. al., 2017). Therefore, from this problem arises the number of unemployed who continues to increase, vocational students who were initially prepared to go straight to work, in fact many are still unemployed.

From BPS data in 2019, the unemployment rate, especially in East Java, is still dominated by vocational school graduates, reaching 6.84% in February 2019, this number is the largest number compared to other education graduates (BPS, 2019). From this data, it is indicated that there is still a lack of readiness for vocational students.

SMKN 1 Trenggalek is a vocational high school that tries to produce graduates to have work readiness and work competencies that can compete in the business or industrial world. However, this has not been fully achieved, only about 41.3% of graduates of SMKN 1 Trenggalek majoring in Automotive Lightweight Vehicle Engineering who have worked. The large number of graduates who have not worked is caused by the very low level of graduate work readiness. This can be seen from the percentage of graduates who are still not working which reaches 44.4%. Although the percentage of graduates who have worked reaches 41.3%, however, many graduates still work outside their fields

of expertise when attending vocational high school, this can be illustrated that students' work readiness is still not as expected.

Therefore, vocational high schools continue to innovate towards the increasingly broad development of the era, equipped with mature work readiness (Phillips, Turnbull, & He, 2015), it is hoped that more vocational students will be accepted into the world of work after completing their studies. Character building can be said to be an alternative problem for vocational high schools' students related to job readiness. Where character building is applied systematically and is included in every learning process, it will have an impact on students' mentalities (Knoll & Horton, 2015). Learning environment variables are also said to be an alternative related to work readiness, where in the learning environment there will be a reciprocal process between the environment and students as seen from the school environment, community and family environment (Rivizzigno, et. al., 2014). Another thing that relates to work readiness is self-efficacy. Self-efficacy is students' confidence to do assignments with their own abilities and as the initial foundation that students have in doing everything, so that students are able to complete assignments independently (Towle, et. al., 2005). Vocational school graduates should already have mature readiness to be ready to enter the work world.

The purpose of this study was to determine the magnitude of the influence of character building on student work readiness, to determine the influence of the learning environment on student work readiness, to determine the magnitude of the influence of self-efficacy on student work readiness and to determine the magnitude of the influence of character building, learning environment and self-efficacy on the work readiness of the twelve grade students of Automotive Lightweight Vehicle Engineering at Public Vocational High School 1 Trenggalek.

## METHODS

This research uses descriptive quantitative research methods. The variables used are the independent variable (X) that is character building, learning environment and self-efficacy and the dependent variable (Y) of work readiness.

The study population was all students of the twelve grade students Automotive Lightweight Vehicle Engineering at the Publik Vocational High School 1 Trenggalek consisting143 students and a sample of 107 students was obtained using proportional random sampling technique. The number of samples per class can be seen that the twelve grade students Automotive Lightweight Vehicle Engineering 1 consist of 27 students, XII Automotive Lightweight Vehicle Engineering 2 consist of 27 students, the twelve grade students Automotive Lightweight Vehicle Engineering 3 consist of 26 students, and the twelve grade students Automotive Lightweight Vehicle Engineering 4 consist of 27 students.

The instrument used in this study was a questionnaire sheet that are character building, learning environment, self-efficacy and work readiness with a Likert scale consisting of 4 alternative answer choices, namely Disagree (TS), less Disagree (KS), Agree (S), Strongly Agree (SS).

The implementation of the instrument tryout for the twelve grade students Automotive Lightweight Vehicle Engineering at Public Vocational High School 11 Malang consisted of 30 students. The instrument test used SPSS 23 for windows with validity and reliability tests. Validity test was used to determine whether the statement item is valid or invalid. Reliability test to determine r count then the reliability coefficient is compared with alpha at least 0.6. If the reliability coefficient is greater than 0.6 alpha then it is declared reliable.

Research data collection used questionnaires and documentation. Data analysis used descriptive statistics to describe the conditions of each research variable. Multiple regression analysis is used to analyze the dependent variable and the independent variable. The classic assumption test which includes the normality test with Kolmogrov Smirnov and the scatterplot graph is used to determine whether the data is normally distributed or not, the multicollinearity test is to see whether there is

multicollinearity in the multiple linear regression model and heteroscedasticity test by looking at the scatterplot image if the dots do not form a pattern, then it can be said that there is no heteroscedasticity. Hypothesis testing consists of the t-test which is used to determine the effect partially, the f test is used to determine the effect simultaneously. The coefficient of determination is used to explain the effect of the independent variables on the variation of the dependent variable. Effective contribution is to know how much influence the independent variable with the dependent variable.

## RESULTS

### Descriptive Statistical Analysis

The character-building frequency distribution is described below.

Table 1. Character Building Frequency Distribution

| No | Interval | Category | Frequency | Percentage |
|---|---|---|---|---|
| 1 | 47-50 | Disagree | 16 | 14,96% |
| 2 | 51-54 | Less Disagree | 22 | 20,56% |
| 3 | 55-58 | Agree | 40 | 37,38% |
| 4 | 59-64 | Strongly Agree | 29 | 27,10% |
| Total | | | 107 | 100% |

Source: Research Data Processing Results (2020)

From Table 1, it is known that as many as 40 students or 37.38% of the twelve grade students Automotive Lightweight Vehicle Engineering at Public Vocational High School 1 Trenggalek stated that they agree that character building affects students' work readiness.

The frequency distribution of the learning environment is described below.

Table 2. Frequency Distribution of the Learning Environment

| No | Interval | Category | Frequency | Percentage |
|---|---|---|---|---|
| 1 | 43-48 | Disagree | 8 | 7,48% |
| 2 | 49-54 | Less Disagree | 42 | 39,25% |
| 3 | 55-60 | Agree | 44 | 41,12% |
| 4 | 61-65 | Strongly Agree | 13 | 12,15% |
| Total | | | 107 | 100% |

Source: Research Data Processing Results (2020)

From Table 2, it is known that as many as 44 students or 41.12% of twelve grade students Automotive Lightweight Vehicle Engineering at Public Vocational High School 1 Trenggalek agree that the learning environment can affect work readiness.

The distribution of the frequency of self-efficacy is described below.

Table 3. Self-Efficacy Frequency Distribution

| No | Interval | Category | Frequency | Percentage |
|---|---|---|---|---|
| 1 | 47-51 | Disagree | 16 | 14,95% |
| 2 | 52-56 | Less Disagree | 34 | 31,78% |
| 3 | 57-61 | Agree | 44 | 41,12% |
| 4 | 62-66 | Strongly Agree | 13 | 12,15% |
| Total | | | 107 | 100% |

Source: Research Data Processing Results (2020)

From Table 3, it is known that as many as 44 students or 41.12% of the twelve grade students Automotive Lightweight Vehicle Engineering at Public Vocational High School 1 Trenggalek agreed that self-efficacy affects job readiness.

The distribution of the readiness frequency is described below.

Table 4. Work Readiness Frequency Distribution

| No | Interval | Category | Frequency | Percentage |
|---|---|---|---|---|
| 1 | 46-51 | Disagree | 3 | 2,80% |
| 2 | 52-57 | Less Disagree | 30 | 28,04% |
| 3 | 58-63 | Agree | 39 | 36,45% |
| 4 | 64-69 | Strongly Agree | 35 | 32,71% |
| Total | | | 107 | 100% |

Source: Research Data Processing Results (2020)

From Table 4, it is known that 39 students or 36.45% of the twelve grade students of Automotive Lightweight Vehicle Engineering at Public Vocational High School 1 Trenggalek agreed with work readiness.

**Multiple Linear Regression Analysis**

The results of the regression equation data analysis using SPSS 23 for window are described below.

Table 5. Multiple Linear Regression Analysis

| Model | Unstandardized Coefficients | |
|---|---|---|
| | B | Std Error |
| 1. (Constant) | ,915 | 4,185 |
| *Character Building* | ,370 | ,097 |
| Learning Environment | ,173 | ,083 |
| *Self-Efficacy* | ,521 | ,092 |

Based on the Table 5, the result of the regression equation is.

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$

$Y = 0{,}915 + 0{,}370\ X_1 + 0{,}173\ X_2 + 0{,}521\ X_3 + e$

**Classical Assumption Test**

The classic assumption test can be described as follows.

1. Normality Test

Based on the result of data analysis, the Asymp. Sig (2-tailed) is 0.200. This means the Asymp value. Sig> 0.05. That way the residual value is said to be normally distributed.

2. Multicollinearity Test

From the results of data analysis, the character building variable tolerance value shows the number 0.520 and the VIF value 1.921, the tolerance value for the learning environment variable shows the number 0.546 and the VIF value 1.831, and the tolerance value for the self-efficacy variable shows the number 0.465 and the VIF value is 2.153. Therefore, the three independent variables have a tolerance value of more than 0.10 and a VIF value of less than 10.0, so there is no multicollinearity.

3. Heteroscedasticity Test

From Figure 1, it is known that heteroscedasticity does not occur because it does not form dots or patterns that are clearly visible in the image.

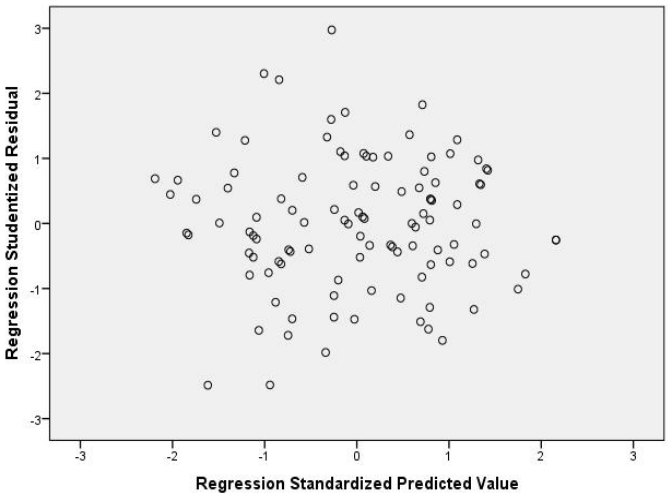


Figure 1. Scatterplot Graph of Heteroscedasticity Test

**Hypothesis Testing**

Hypothesis testing can be described as follows.

1. t-Test (Persial Test)
   a. From the character-building data analysis on job readiness, the tcount value is 3.833> ttable 1.65978 and a significance value is 0.000 <0.05. That there is a significant effect of character building on job readiness.
   b. From the analysis of the learning environment data on job readiness, the tcount value is 2.091> ttable 1.65978 and a significance value is 0.039 <0.05. That there is a significant effect of the learning environment on work readiness.
   c. From the analysis of self-efficacy data on job readiness, the tcount value is 5.698> ttable 1.65978 and a significance value is 0.000 <0.05. There is a significant effect of self efficacy on job readiness.

2. F Test (Simultaneous Test)
   Based on the results of data analysis, it shows that the value of fcount is 70.861> ftabel 2.69 and a significance value of 0.000 <0.05, so character building, learning environment and self-efficacy have a simultaneous effect on job readiness.

**Coefficient of Determination (R2)**

Based on the results of the analysis, it shows that the magnitude of the R square is 0.674, meaning that the independent variables, namely character building, learning environment and self-efficacy, can explain the dependent variable, namely work readiness of 67.4% and 32.6%, which can be influenced by other variables.

**Effective Contribution**

From the results of the analysis, the beta value for character building is 0.299, the learning environment is 0.159 and self-efficacy is 0.471. The formula looks for the effective contribution of each variable, namely the beta coefficient × zero order × 100%. From the calculation results can be illustrated by the graph as follows.

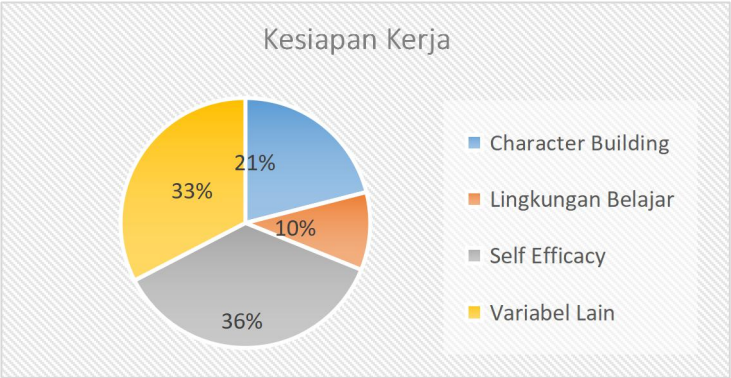


Figure 2. Effective Contribution Variable

From Figure 2. it is known that the character-building variable is 21.02%, the learning environment is 10.08% and the self-efficacy is 36.27% contributing to this research. Therefore, that the self-efficacy variable gives a bigger contribution than the character-building variable and the learning environment. And if the three variables are combined, the results will affect work readiness by 67.37%, rounded up to 67.4%.

## DISCUSSION

### Effect of character building on job readiness of the twelve grade students of Automotive Lightweight Vehicle Engineering at Public Vocational High School 1 Trenggalek

Based on the research that has been done, it shows significant results between character building on job readiness. It is known from the data analysis that the tcount value is 3,833> ttable 1.65978 and the significance value is 0.000 <0.05. Then there is the effect of character building on job readiness. 37.38% or 40 students agreed that character building had an effect on job readiness, 14.96% or 16 students stated that they did not agree with this assumption. The student's view is because the understanding of character building in students is still lacking, students think they still have a weak mental attitude and students think that the value is more valued th an the process, so an intention arises to cheat.

It can be explained that the implementation of character building in twelve grade students Automotive Lightweight Vehicle Engineering at Public Vocational High School 1 Trenggalek has been felt by the students. In character building, students do not only master the theory taught by the teacher, but also improve attitudes and mentality in students. Character building is all comprehensive ways so that students understand behavior in accordance with Pancasila and good character (Gunawan, et. al., 2018). Also, implementing character building in schools with extracurricular activities as well as applying character education to the educational curriculum. Students' work readiness will be rational if schools and students care about work readiness. Thus, it takes concrete steps to achieve this. One of them is to continue to synchronize the demands of the world of work for education in Vocational High Schools related to character education which continues to be optimized.

### The influence of the learning environment on the work readiness of twelve grade students Automotive Lightweight Vehicle Engineering Public Vocational High School 1 Trenggalek

Based on the research that has been done, it shows significant results between the learning environment and work readiness. It is known from the data analysis that the t-count value is 2.091> 1.65978 and the significance value is 0.039 <0.05. Then there is the influence of the learning environment on work readiness. Even though 41.12% or 44 students agreed that the learning environment had an effect on job readiness, 7.48% or 8 students stated that they did not agree with

this assumption. The students' views are due to the wrong understanding of the social environment, students who have problems in the family so that they are not good for learning achievement at school and have an effect on work readiness.

It can be illustrated that the twelve grade students of Automotive Lightweight Vehicle Engineering at Public Vocational High School 1 Trenggalek have implemented a conducive learning environment and can support the learning process to run smoothly. Where a conducive learning environment makes student learning activities in school run well, students are comfortable with conditions in the school environment such as clean, quiet classroom conditions, colleagues who support each other and encouragement, strengthening and motivation from teachers also shape student confidence increases when be in the school environment. From this, it automatically shapes the behavior and personality of students who are ready to enter the world of work (Eilam & Trop, 2014). The learning environment is an interaction between the environment and individuals to understand the effects (Harjali, 2017). The learning environment is divided into schools, homes and communities. When everything has been implemented, students are comfortable in learning and improve learning achievement and increase work readiness.

**The effect of self-efficacy on work readiness of twelve grade students Automotive Lightweight Vehicle Engineering Public Vocational High School 1 Trenggalek**

Based on the research that has been done, it shows significant results between self-efficacy and job readiness. From the data analysis, it is known that the t-count value is 5.698> t table 1.65978 and a significance value of 0.000 <0.05. So there is an effect of self-efficacy on work readiness. Although 41.12% or 44 students agreed that self-efficacy had a positive effect on job readiness, 14.95% or 16 students stated that they did not agree with this assumption. The student's view is due to an understanding of self-efficacy in students, where students do not have clear ideals, students lack a sense of self-confidence.

It can be explained that students in twelve grade students Automotive Lightweight Vehicle Engineering at Public Vocational High School 1 Trenggalek already have self-efficacy or a belief in themselves that they are able to do something on their own. Self-efficacy is students' self-confidence to be able to do tasks on their own (Zulkosky, 2009). Self-efficacy can affect reasoning power, thinking power, motivation and positive thinking for students. Students who have high self-efficacy can know their own ability to be able to do something and are ready to face the world of work. Meanwhile, students who have low self-efficacy cannot or do not know their own ability to do assignments or to face the world of work.

**The effect of character building, learning environment and self-efficacy on work readiness of twelve grade students of Automotive Lightweight Vehicle Engineering at Public Vocational High School 1 Trenggalek**

Based on the analysis of the research results that there is a positive effect of character building, learning environment and self-efficacy on job readiness with the influence of 67.4% and 32.6% can be influenced by other variables. It is known that the value of fcount is 70.861> ftable 2.69 and the significance value is 0.000 <0.05. So there is a simultaneous effect of character building, learning environment and self-efficacy on job readiness. Of the three variables the most influential, namely self-efficacy contributed 36.27%, character building by 21.02% and the learning environment by 10.08% in this study. From this explanation, it is concluded that there is a positive influence together from the variable character building, learning environment and self-efficacy on the work readiness of

twelve grade students Automotive Lightweight Vehicle Engineering of Public Vocational High School 1 Trenggalek.

## CONCLUSION

Based on the results of the research data analysis, it can be concluded that there is a significant influence partially and simultaneously variable character building, learning environment and self-efficacy on work readiness of twelve grade students Automotive Lightweight Vehicle Engineering at SMKN 1 Trenggalek. From these results, the variable cell efficacy has the greatest influence on student work readiness followed by character building variables and the learning environment. It is expected that all students can pay attention to the importance of high self-confidence, have good character and be able to do activity in a conducive environment to support work readiness after completing education at Vocational High Schools.

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